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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,774	01/18/2001	Joseph M. Cannon	CANNON 115-104	5953

7590 07/14/2004

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EXAMINER	
TRAN, TUAN A	

ART UNIT	PAPER NUMBER
2682	7

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/761,774	Applicant(s) CANNON ET AL.	
	Examiner Tuan A Tran	Art Unit 2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14 and 16-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14 and 16-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 4-5, 7-12, 14, 16-21 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Croft et al. (6,490,439).

Regarding claims 16 and 23, Croft discloses an apparatus for optimizing link quality of a wireless piconet device to a user comprising: means for firstly determining an acceptable level of at least one aspect of a link quality of a wireless connection to a short range network; and means for providing first indication of compliance to the acceptable level of the at least one aspect of the link quality to the user, wherein the acceptable level of the at least one aspect is based on a minimum desired communications quality (See figs. 8-11 and col. 8 line 57 to col. 9 line 2, col. 9 line 61 to col. 10 line 3).

Claims 7 and 14 are rejected for the same reasons as set forth in claims 16 and 23, as method.

Claims 1 and 4 are rejected for the same reasons as set forth in claims 16 and 23.

Regarding claim 17, Croft discloses as cited in claim 16. Croft further discloses the apparatus varies visual indication according to the received signal strength (See fig. 11 and col. 9 line 61 to col. 10 line 3), and the received signal strength varies dependent upon locations of the receiving wireless piconet device; therefore the apparatus inherently comprises means for allowing the user to physically move the wireless piconet device; means for secondly determining the acceptable level of the at least one aspect of the link quality; and means for providing a second indication of compliance to the acceptable level of at least one aspect of the link quality to the user.

Claim 8 is rejected for the same reasons as set forth in claim 17, as method.

Regarding claims 18-19, Croft discloses as cited in claim 16. Croft further discloses the apparatus comprises: a processor coupled to the transceiver, the processor adapted to vary the visual indication; and a memory unit coupled to the processor, the memory unit for storing instructions executed by the processor for varying the visual indication (See fig. 9 and col. 12 lines 28-35). Therefore the apparatus inherently comprises means for generating a Read_RSSI command or a Get_Link_Quality command (command for measuring the signal strength) as well as means for retrieving a link quality value returned in response to the command.

Claims 9-10 are rejected for the same reasons as set forth in claims 18-19, as method.

Regarding claim 20-21, Croft further discloses the wireless connection is a piconet connection or a scatternet connection (See fig. 8).

Claims 11-12 are rejected for the same reasons as set forth in claims 20-21, as method.

Regarding claim 2, Croft discloses as cited in claim 1. Croft further discloses the piconet front end conforms to Bluetooth standards. (See figs. 8-9 and col. 8 line 5 to col. 9 line 2).

Regarding claim 5, Croft further discloses the visible user link quality indicator comprises an LED (See col. 10 lines 4-12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 3, 6, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Croft et al. (6,490,439).

Regarding claim 22, Croft discloses as cited in claim 16. However, Croft does not mention that the indication is audible. Audible indication is well known in the art, therefore it would have been obvious to one ordinary skill in the art at

the time the invention was made to use audible indication alone or in combination with visual indication for the advantage of expanding the capability of the system to various types of alert modes as well as for allowing the users to set the alert mode in accordance to their intentions.

Claims 13 is rejected for the same reasons as set forth in claim 22, as method.

Claim 3 is rejected for the same reasons as set forth in claim 22.

Regarding claim 6, Croft discloses as cited in claim 4. However, Croft does not mention that the visible user link quality indicator comprises a graphical display. Graphical display is common in the art, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use graphical display for the advantage of expanding the capability of the system to various types of display.

Response to Arguments

Applicant's arguments filed 04/30/2004 have been fully considered but they are not persuasive.

a. The Applicant argued that Croft fails to provide an indication about exceeding a given connection quality level (acceptable level as claimed) (See Remark, pages 7-8). The Examiner respectfully disagrees with the Applicant's arguments because Croft does provide an indication whether the at least minimum acceptable level communication link has been established (See col. 9

lines 65-66). For that reason, the Examiner remains the rejections for all the pending claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tuan Tran

AU 2682

VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

7/12/04